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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/938,742	08/24/2001	Nobukazu Kurauchi	42478-8800	4090

21611 7590 09/02/2008

SNELL & WILMER LLP (OC)
600 ANTON BOULEVARD
SUITE 1400
COSTA MESA, CA 92626

EXAMINER	
EKPO, NNENNA NGOZI	
ART UNIT	PAPER NUMBER
2623	

MAIL DATE	DELIVERY MODE
09/02/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/938,742	KURAUCHI, NOBUKAZU	
	Examiner	Art Unit	
	Nnenna N. Ekpo	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06/16/2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date. _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Acknowledgment

1. This Office Action is responsive to the remarks filed June 16, 2006.

Response to Arguments

2. Applicant's arguments, see pages 14-23 of remarks, filed 06/16/2008, with respect to 1, 10, 16 and 19-21 have been fully considered and are persuasive.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-4, 7-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Goode (US Patent Number 6,718,552) in view of Kasai et al. (US Patent Number 6,460,018).

Regarding **claim 1**, Goode discloses a nonlinear broadcast system that broadcasts material data by executing a plurality of transfer processes of the material data for broadcast in parallel for at least a certain duration, the transfer processes for broadcast utilizing a common hardware resource, the nonlinear broadcast system comprising (see fig 1):

first allocation means for allocating a required amount of the hardware resource to each transfer process for broadcast, for the corresponding duration shown by the duration information (see column 4, lines 12-16, fig 1 (channels 1,2,3));

second allocation means for allocating, to one or more background transfer processes that are processes other than the transfer processes for broadcast, as much amount of the hardware resource as possible, so as not to exceed the calculated available amount (see column 4, lines 16-32, fig 1 (channels 5,6,10)); and

process execution means for executing (a) each transfer process for broadcast utilizing the amount of hardware resource allocated by the first allocation means (see column 4, lines 64-67, column 5, lines 1-4), and (b) each background transfer process utilizing the amount of hardware resource allocated by the second allocation means (see column 4, lines 64-67, column 5, lines 1-4),

the hardware resource is a band for an access to the recording medium (see col. 3, lines 45-57),

when processing targets of the plurality of transfer processes indicate a same range in a same video data file, the first allocation means does not exceptionally allocate the required amount of the hardware resource to one of the plurality of transfer processes executed in a later duration and the process execution means executes the transfer process to which the required amount of the hardware resource is not exceptionally allocated, by accessing the cache means to read the material data instead of accessing the recording medium (see col. 3, lines 20-41).

However, Goode fails to specifically disclose material storage means storing that is a recording medium storing a video data file including the material data; cache means that is a memory temporarily storing the material data read from the recording medium, processing target specification information storage means storing processing target

specification information that specifies which range in a video data file is indicated by the material data that is a processing target of each of the plurality of transfer process; duration information storage means storing duration information showing durations, in each of which a different one of the transfer processes for broadcast is scheduled to be executed; available amount calculation means for calculating an available amount of the hardware resource remaining after the first allocation means has allocated the required amount to each transfer process for broadcast, processing target specification information.

Kasai et al. discloses material storage means that is a recording medium storing a video data file including material data (see col. 1, lines 41-44, col. 6, lines 41-43, column 9, lines 33-41, column 12, line 2, col. 88, lines 48-63, fig 74);

cache means that is a memory temporarily storing the material data read from the recording medium (see col. 9, lines 23-41);

processing target specification information storage means storing processing target specification information that specifies which range in a video data file is indicated by the material data that is a processing target of each of the plurality of transfer processes (see col. 37, lines 42-49);

processing target specification information (see col. 37, lines 42-49, col. 39, lines 40-45);

duration information storage means storing duration information showing durations, in each of which a different one of the transfer processes for broadcast is scheduled to be executed (see fig 3c, column 10, lines 32-41);

available amount calculation means for calculating an available amount of the hardware resource remaining after the first allocation means has allocated the required amount to each transfer process for broadcast (see fig 28, column 4, lines 30-34, column 38, lines 46-67, column 39, column 40, lines 1-4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Goode's invention with the above mentioned limitation as taught by Kasai et al. for the advantage of acquiring how much bandwidth is available before transmitting the next set of data.

Regarding **claim 2**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 1*). Kasai et al. discloses the nonlinear broadcast system wherein the available amount calculation means calculates the available amount of the hardware resource, every time when one of a start time and an end time of each duration shown by the duration information is reached (see fig 16 and column 27, lines 45-51).

Regarding **claim 3**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 2*). Goode discloses the first allocation means allocates a required bandwidth of the band to each transfer process for broadcast (see fig 9, column 9, lines 62-67, column 10, lines 1-5),

the second allocation means allocates, to each background transfer process, as much bandwidth of the band as possible, so as not to exceed the calculated available bandwidth (see column 4, lines 16-32, fig 1 (5, 6, 10)), and

the process execution means executes (a) each transfer process for broadcast utilizing the bandwidth allocated by the first allocation means, and (b) each background transfer process utilizing the bandwidth allocated by the second allocation means (see column 4, lines 64-67, column 5, lines 1-4). However, Goode fail to disclose wherein the material storage means is a readable and writable recording medium, the hardware resource is a band for an access to the recording medium, the available amount calculation means calculates an available bandwidth by subtracting the bandwidth allocated to each transfer process for broadcast by the first allocation means from a total bandwidth of the band for the access to the recording medium.

Kasai et al. discloses wherein the material storage means is a readable and writable recording medium (see column 70, lines 31-37),

the hardware resource is a band for an access to the recording medium (see column 9, lines 23-30),

the available amount calculation means calculates an available bandwidth by subtracting the bandwidth allocated to each transfer process for broadcast by the first allocation means from a total bandwidth of the band for the access to the recording medium (see column 39, lines 6-39).

Regarding **claim 4**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 3*). Kasai et al. discloses the nonlinear broadcast system wherein each background transfer process is a process for writing the material data to the recording medium (see fig 63, column 73, lines 63-67, column 74, lines 13) and

each transfer process for broadcast is a process for reading the material data from the recording medium (see column 74, lines 64-67 and column 75, lines 1-4).

Regarding **claim 7**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 4*). Kasai et al. discloses the nonlinear broadcast system, further comprising transfer complete time display means for obtaining an amount of data to be transferred by each background transfer process, calculating a time at which the background transfer process is to be completed, based on the bandwidth allocated by the second allocation means, and displaying the calculated time (see fig 39, column 50, lines 39-55).

Regarding **claim 8**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 3*). Kasai et al. discloses the nonlinear broadcast system, wherein each transfer process for broadcast is a process for reading the material data from the recording medium, organizing the read material data so as to be in a format suitable for a streaming-type delivery, and performing the streaming-type delivery (see column 28, lines 27-33, column 74, lines 64-67, column 75, lines 1-4), and

each background transfer process is a process for reading the material data from the recording medium, organizing the read material data so as to be in a format suitable for a download-type delivery, and performing the down-load type delivery (see column 7, lines 35-57, column 74, lines 64-67, column 75, lines 1-4).

Regarding **claim 9**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 1*). Kasai et al. discloses the nonlinear broadcast system, wherein the available amount calculation means calculates the available amount, every time when one of (a) a time that is a predetermined duration before a start time of each duration shown by the duration information (see fig 15a and 15b, column 28, lines 11-46) and (b) an end time of each duration shown by the duration information is reached (see fig 15a and 15b, column 28, lines 11-46).

Regarding **claims 10 and 16**, Goode discloses a hardware resource allocation method for performing hardware resource allocation for processes, in a nonlinear broadcast system in which material data are broadcasted by executing a plurality of transfer processes of the material data for broadcast in parallel for at least a certain duration, the transfer processes for broadcast utilizing a common hardware resource, the hardware resource allocation method comprising (see fig 1):

a first allocation step for allocating a required amount of the hardware resource to each transfer process for broadcast for the corresponding duration shown by the duration information (see column 4, lines 12-16, fig 1 (channels 1,2,3));

second allocation step for allocating, to one or more background transfer processes that are processes other than the transfer processes for broadcast, as much amount of the hardware resource as possible, so as not to exceed the calculated available amount (see column 4, lines 16-32, fig 1 (channels 5,6,10));

the hardware resource is a band for an access to the recording medium (see col. 3, lines 45-57),

when processing targets of the plurality of transfer processes indicate a same range in a same video data file, the first allocation means does not exceptionally allocate the required amount of the hardware resource to one of the plurality of transfer processes executed in a later duration and the process execution means executes the transfer process to which the required amount of the hardware resource is not exceptionally allocated, by accessing the cache means to read the material data instead of accessing the recording medium (see col. 3, lines 20-41).

However, Goode fails to specifically disclose material storage means that is a recording medium storing a video data file including the material data; cache means that is a memory temporarily storing the material data read from the recording medium, processing target specification information storage means storing processing target specification information that specifies which range in a video data file is indicated by the material data that is a processing target of each of the plurality of transfer process and duration information storage means storing duration information showing durations, in each of which a different one of the transfer processes for broadcast is scheduled to be executed and an available amount calculation step for calculating an available

amount of the hardware resource remaining after the required amount has been allocated to each transfer process for broadcast in the first allocation step, processing target specification information.

Kasai et al. discloses material storage means that is a recording medium storing a video data file including material data (see col. 1, lines 41-44, col. 6, lines 41-43, column 9, lines 33-41, column 12, line 2, col. 88, lines 48-63, fig 74);

cache means that is a memory temporarily storing the material data read from the recording medium (see col. 9, lines 23-41);

processing target specification information storage means storing processing target specification information that specifies which range in a video data file is indicated by the material data that is a processing target of each of the plurality of transfer processes (see col. 37, lines 42-49);

processing target specification information (see col. 37, lines 42-49, col. 39, lines 40-45) and duration information storage means storing duration information showing durations, in each of which a different one of the transfer processes for broadcast is scheduled to be executed (see fig 3c, column 10, lines 32-41); and

an available amount calculation step for calculating an available amount of the hardware resource remaining after the required amount has been allocated to each transfer process for broadcast in the first allocation step (see fig 28, column 4, lines 30-34, column 38, lines 46-67, column 39, column 40, lines 1-4).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Goode's invention with the above mentioned

limitation as taught by Kasai et al. for the advantage of acquiring how much bandwidth is available before transmitting the next set of data.

Regarding **claims 11 and 17**, Goode and Kasai et al. discloses everything claimed as applied above (*see claims 10 and 16*). Kasai et al. discloses the program wherein the available amount calculation means calculates the available amount of the hardware resource, every time when one of a start time and an end time of each duration shown by the duration information is reached (see fig 16 and column 27, lines 45-51).

Regarding **claim 12**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 10*). Goode discloses the first allocation means allocates a required bandwidth of the band to each transfer process for broadcast (see fig 9, column 9, lines 62-67, column 10, lines 1-5),

the second allocation means allocates, to each background transfer process, as much bandwidth of the band as possible, so as not to exceed the calculated available bandwidth (see column 4, lines 16-32, fig 1 (5, 6, 10)). However, Goode fail to disclose wherein the material storage means is a readable and writable recording medium, the hardware resource is a band for an access to the recording medium, the available amount calculation means calculates an available bandwidth by subtracting the bandwidth allocated to each transfer process for broadcast by the first allocation means from a total bandwidth of the band for the access to the recording medium.

Kasai et al. discloses wherein the material storage means is a readable and writable recording medium (see column 70, lines 31-37),

the hardware resource is a band for an access to the recording medium (see column 9, lines 23-30),

the available amount calculation means calculates an available bandwidth by subtracting the bandwidth allocated to each transfer process for broadcast by the first allocation means from a total bandwidth of the band for the access to the recording medium (see column 39, lines 6-39).

Regarding **claim 13**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 12*). Kasai et al. discloses the hardware resource allocation method wherein each background transfer process is a process for writing the material data to the recording medium (see fig 63, column 73, lines 63-67, column 74, lines 13) and

each transfer process for broadcast is a process for reading the material data from the recording medium (see column 74, lines 64-67 and column 75, lines 1-4).

Regarding **claim 14**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 12*). Kasai et al. discloses the hardware allocation method, wherein each transfer process for broadcast is a process for reading the material data from the recording medium, organizing the read material data so as to be in a format

suitable for a streaming-type delivery, and performing the streaming-type delivery (see column 28, lines 27-33, column 74, lines 64-67, column 75, lines 1-4), and

each background transfer process is a process for reading the material data from the recording medium, organizing the read material data so as to be in a format suitable for a download-type delivery, and performing the down-load type delivery (see column 7, lines 35-57, column 74, lines 64-67, column 75, lines 1-4).

Regarding **claim 15 and 18**, Goode and Kasai et al. discloses everything claimed as applied above (*see claims 10 and 16*). Kasai et al. discloses the hardware resource allocation method, wherein the available amount calculation means calculates the available amount, every time when one of (a) a time that is a predetermined duration before a start time of each duration shown by the duration information (see fig 15a and 15b, column 28, lines 11-46) and (b) an end time of each duration shown by the duration information is reached (see fig 15a and 15b, column 28, lines 11-46).

Regarding **claim 19**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 1*). Goode discloses a total occupancy indicating a total amount of the hardware resource used after starting reproduction of the processing target specification information, or ending reproduction of the processing target specification information (see col. 2, lines 67-col. 3, line 5).

Kasai et al. discloses processing target specification (see col. 37, lines 42-49, col. 39, lines 40-45),

an allocation type indicating to start reproduction of the processing target specification information, or to end reproduction of the processing target specification information (see col. 27, lines 45-51, fig 16),

an allocation time to start reproduction of the processing target specification information, or to end reproduction of the processing target specification information (see col. 25, lines 22-38),

a resource ID indicating a hardware resource to start reproduction of the processing target specification information, or to end reproduction of the processing target specification information (see col. 21, lines 48-57).

Regarding **claim 20**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 19*). Goode discloses a maximum value indicating the maximum amount of resource available for a hardware specified by the resource ID (see col. 2, lines 67-col. 3, line 5),

a total occupancy indicating a total amount of the hardware resource used after starting reproduction of the processing target specification information, or ending reproduction of the processing target specification information (see col. 2, lines 67-col. 3, line 5).

Kasai et al. discloses processing target specification (see col. 37, lines 42-49, col. 39, lines 40-45),

an allocation type indicating to start reproduction of the processing target specification information (see col. 27, lines 45-51, fig 16, col. 25, lines 22-38),

an allocation type indicating to end reproduction of the processing target specification information (see col. 27, lines 45-51, fig 16, col. 25, lines 22-38),

a duration of the reproduction of the processing target specification information (see col. 21, lines 48-57),

a resource ID indicating a hardware resource to start reproduction of the processing target specification information, or to end reproduction of the processing target specification information (see col. 21, lines 48-57).

Regarding **claim 21**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 21*). Kasai et al. discloses processing target specification (see col. 37, lines 42-49, col. 39, lines 40-45);

an allocation type indicating to start reproduction of the processing target specification information (see col. 27, lines 45-51, fig 16, col. 25, lines 22-38),

a program identification corresponding to the processing target specification information (see col. 21, lines 48-57);

track information corresponding to the processing target specification information (see col. 18, lines 60-col. 19, line 24)

an allocation type indicating to end reproduction of the processing target specification information (see col. 27, lines 45-51, fig 16, col. 25, lines 22-38),

a duration of the reproduction of the processing target specification information (see col. 21, lines 48-57),

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. **Claims 5 and 6** are rejected under 35 U.S.C. 103(a) as being unpatentable over Goode (US Patent Number 6,718,552) as applied to claim 4 above, and further in view of Kasai et al. (US Patent Number 6,460,018) and Mitaru et al. (US Patent Number 6,571,351).

Regarding **claim 5**, Goode and Kasai et al. discloses everything claimed as applied above (*see claim 4*). Goode discloses the nonlinear broadcast system wherein the material data is video data (see column 1, lines 49-53),

the nonlinear broadcast system comprises:

a transmitting device for converting the video data so as to be in a broadcast format, and broadcasting the converted video data (see column 3, lines 21-24), the first allocation means (see column 4, lines 12-16, fig 1 (channels 1,2,3)), the second allocation means (see column 4, lines 16-32, fig 1 (channels 5,6,10)), the process execution means, the process execution means executing each transfer process for broadcast for reading the video data from the hard disc corresponding to the nonlinear editing device and outputting the read video data via the coder-decoder (see fig 1, column 4, lines 64-67, column 5, lines 1-4).

Kasai et al. discloses the recording medium is a hard disc (see column 9, lines 33-35), the available amount calculation means (see fig 28, column 4, lines 30-34, column 38, lines 46-67, column 40, lines 1-4) and

a switcher for selecting video data, out of video data outputted by each of the nonlinear editing devices, and sending the selected video data to the transmitting device (see fig 1 (30), column 10, lines 14-22). However, Good and Kasai et al. fail to specifically disclose a plurality of nonlinear editing devices each being provided so as to correspond to one hard disc and including a coder-decoder.

Mitaru et al. discloses a plurality of nonlinear editing devices (see fig 11 (716), each being provided so as to correspond to one hard disc (see fig 1) and including a coder-decoder (see column 8, lines 35-64).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Goode and Kasai et al.'s invention with the above mentioned limitation as taught by Mitaru et al. for the advantage of editing in less amount of time.

Regarding **claim 6** Goode and Kasai et al. discloses everything claimed as applied above (*see claim 5*). Goode discloses a coder-decoder (see column 11, lines 4-7). Kasai et al. discloses the nonlinear broadcast system wherein each nonlinear editing device further includes effect addition means for adding an effect to the video data when the video data is outputted (see column 11, lines 43-48). via the coder-decoder.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nnenna N. Ekpo whose telephone number is 571-270-1663. The examiner can normally be reached on Monday - Friday 7:30 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NNE/nne
August 18, 2008.
/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2623